Introduction To HumanEdj

Keith Harrison-Broninski
CTO Role Modellers (www.rolemodellers.com)

khb@rolemodellers.com

New techniques and tools are allowing organizations to manage and improve processes in which people collaborate flexibly, often across boundaries (http://bit.ly/humanedj-case-studies).

Such processes cannot be described using flowcharts, as in mainstream BPM, or by assembling tasks based on business rules, as in Adaptive Case Management. Rather, collaborative knowledge work processes require a new, simpler approach via which business people can describe, and build IT support for, their own working activities.

This new approach, known as **Human Interaction Management** (HIM, http://bit.ly/him-theory), is a peer-reviewed, widely accepted theory based on 5 principles:

1. Effective team building
2. Structured communication
3. Knowledge creation
4. Empowered time management
5. Collaborative, real-time planning

To implement these principles, HIM work processes are described as **Plans**:

- A Plan divides work into **Stages**, with different Stages having different purposes. In each Stage, the people involved play Roles to provide deliverables. You must be a member of a Stage to have access to deliverables of that Stage. Messages sent as part of a Stage are automatically sent to all members of the Stage.

- The work as a whole is overseen by a Plan **owner**, who adjusts the Plan throughout its life as the work progresses, starting, ending, adding, removing and changing Stages and deliverables as necessary. Others in the Plan have more limited options for changing it, restricted mainly to their own Role.

- A Plan is made from a **template**. Any Plan can be turned into a template for future Plans, thus enabling re-use and improvement of collaborative work.

- Enterprise resources are included in a Plan by defining a **Task** that invokes a Web service, or a workflow in a BPMS that orchestrates multiple Web service calls.

This summary only scratches the surface of HIM, which is a generic framework for describing all aspects of collaborative work. However, for many people the basics are enough. The tool framework supporting HIM, the **Human Interaction Management System** (HIMS, http://bit.ly/hims-technology), of which the reference implementation **HumanEdj** is available free, lets organizations apply the approach outlined above to deliver order of magnitude productivity improvement, build dynamic IT infrastructure, maintain effective partner relationships, and continually improve knowledge work.

Building HIM templates and Plans

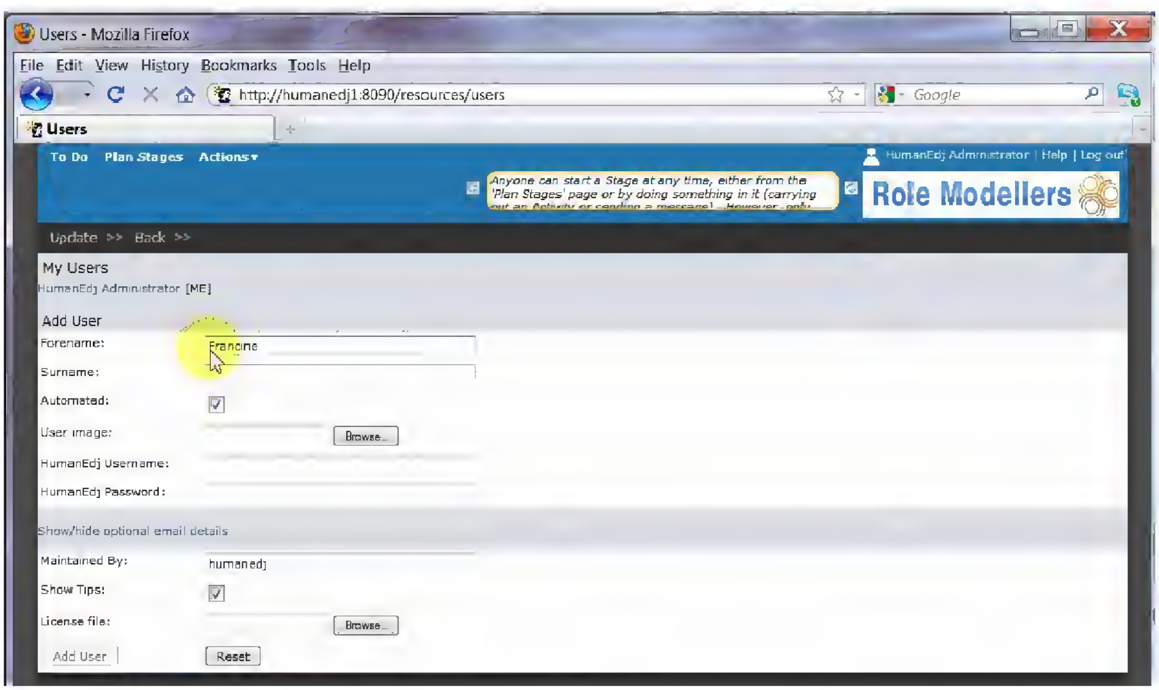
To build HIM templates and Plans it is sensible to use dedicated software such as HumanEdj, rather than a general-purpose diagramming tool. This is because the modeling framework is not based on programmatic control flow that can be depicted in flowchart style (as, for example, is BPMN with its swim lanes), but rather on Roles that interact in a structured but non-linear way. A 2-dimensional picture can be drawn of a HIM Plan – and the desktop edition of HumanEdj generates and lays out such diagrams automatically – but this is not the optimal way to define or depict the interactions between Roles as they produce and consume deliverables across different Stages.

Note, however, that HIM Plans and templates are models like any other. HumanEdj stores Plans and templates natively in a standard format - XMI, the dialect of XML defined by the OMG for models, which is supported by many leading modeling tools. HumanEdj also exports Plans and templates automatically to JSON, a data definition notation widely used by Web developers, and an ideal basis for business intelligence reporting.

In this article I will walk through the main steps in building and using HIM templates and Plans via a Web browser. The steps are based on the tutorial videos available online (http://bit.ly/hims-videos), and illustrated with stills from these videos. After reading the article, you may like to download HumanEdj, and see for yourself how easy it is to start managing dynamic, cross-boundary knowledge work processes.

The Team

Before preparing an example Plan, consider who will be involved, and create a HumanEdj account for each person. To make accounts, login as the administrator (humanedj/humanedj), click on “HumanEdj Administrator” in the top right-hand corner and then on “My Users” to add a user with your own name:



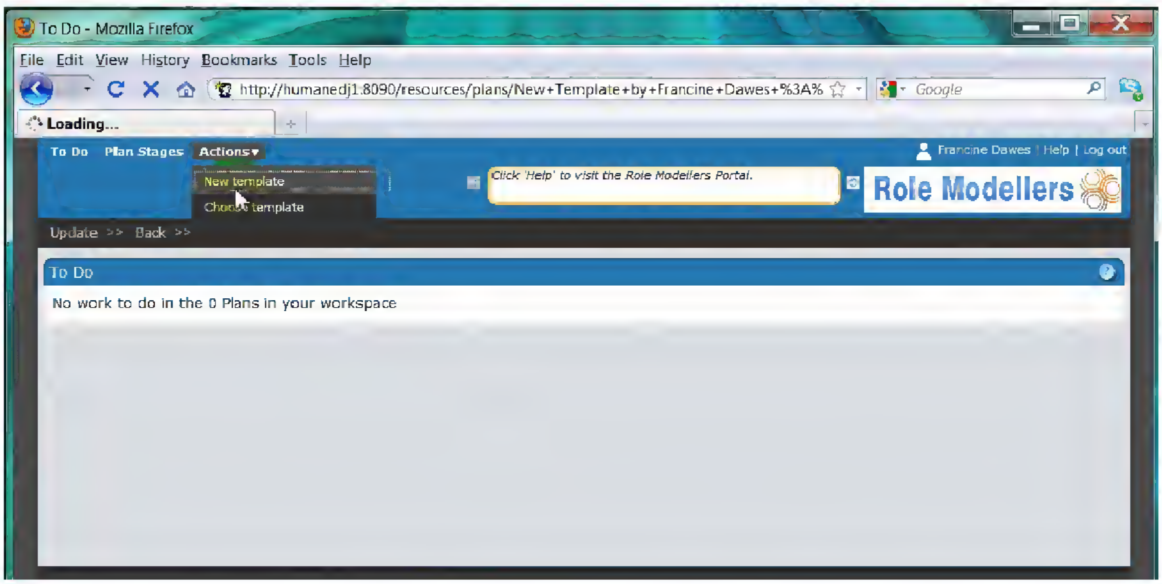
Then login as yourself, and create users for your colleagues in a similar way. By creating the other users from your own account (rather than as the administrator), you will be able to manage

their accounts - for example, to reset a password or delete an account. If you want to reassign control over another account to another person, update the username specified for that account in the "Maintained By" field. The free edition of HumanEdj will let you use up to 4 user accounts plus the administrator account.[1]

The discussion below assumes that you will be trying out HumanEdj alone, and logging in to the various user accounts yourself. A simple way to do this is to have various different browsers open (for example, Internet Explorer, Mozilla Firefox, Google Chrome, and Apple Safari) and login to HumanEdj via each browser as a different person. If you let the browsers remember your authentication details, there will be no need to enter usernames and passwords again during future sessions.

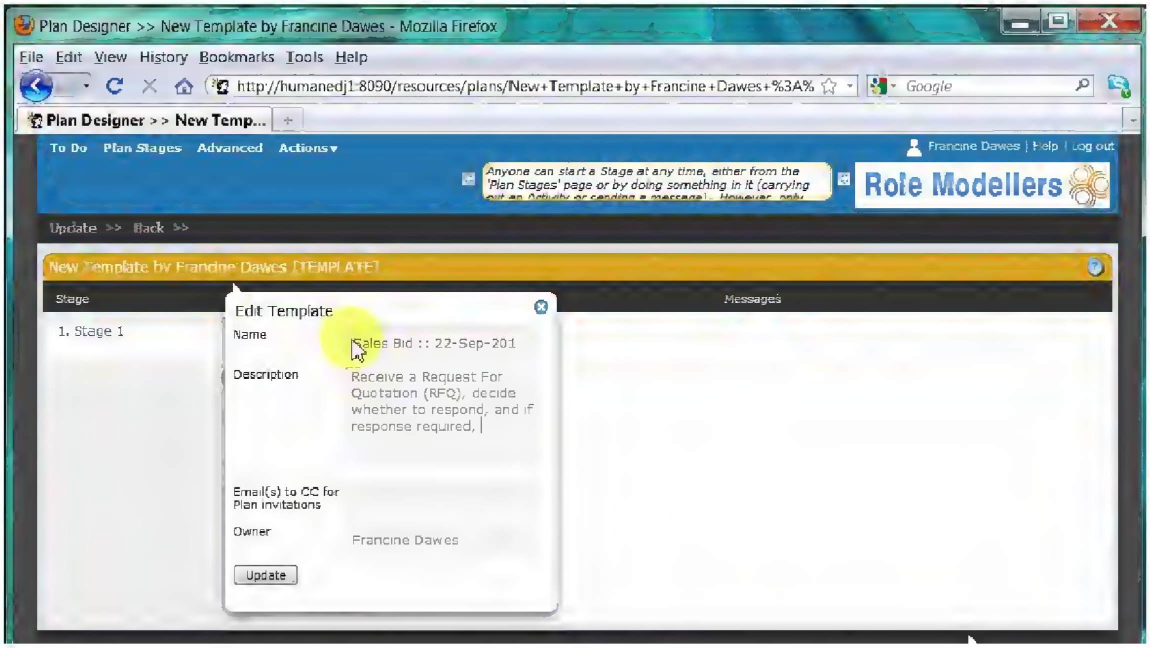
Creating A Template

We will create a new template for managing a Sales Bid. Select "New template" from the **Actions** menu, as shown below:

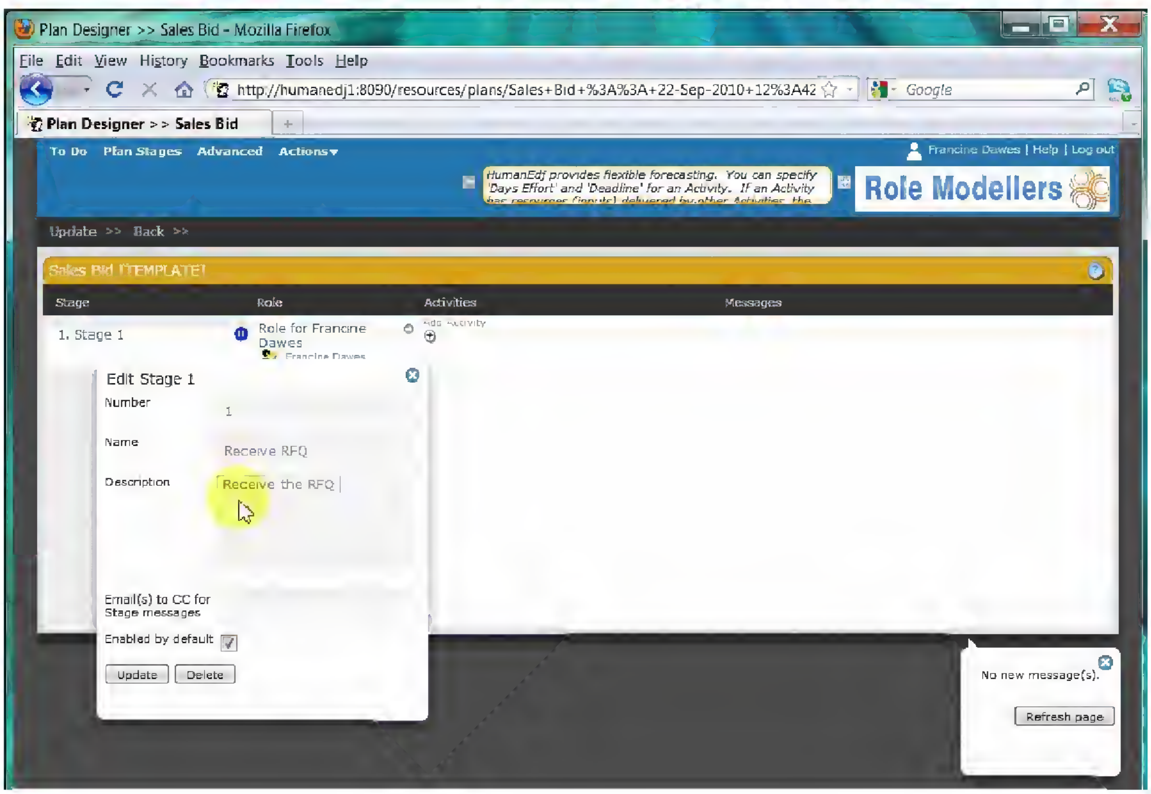


Rename the template by **double-clicking** on the title, leaving the time stamp intact and adding a description:

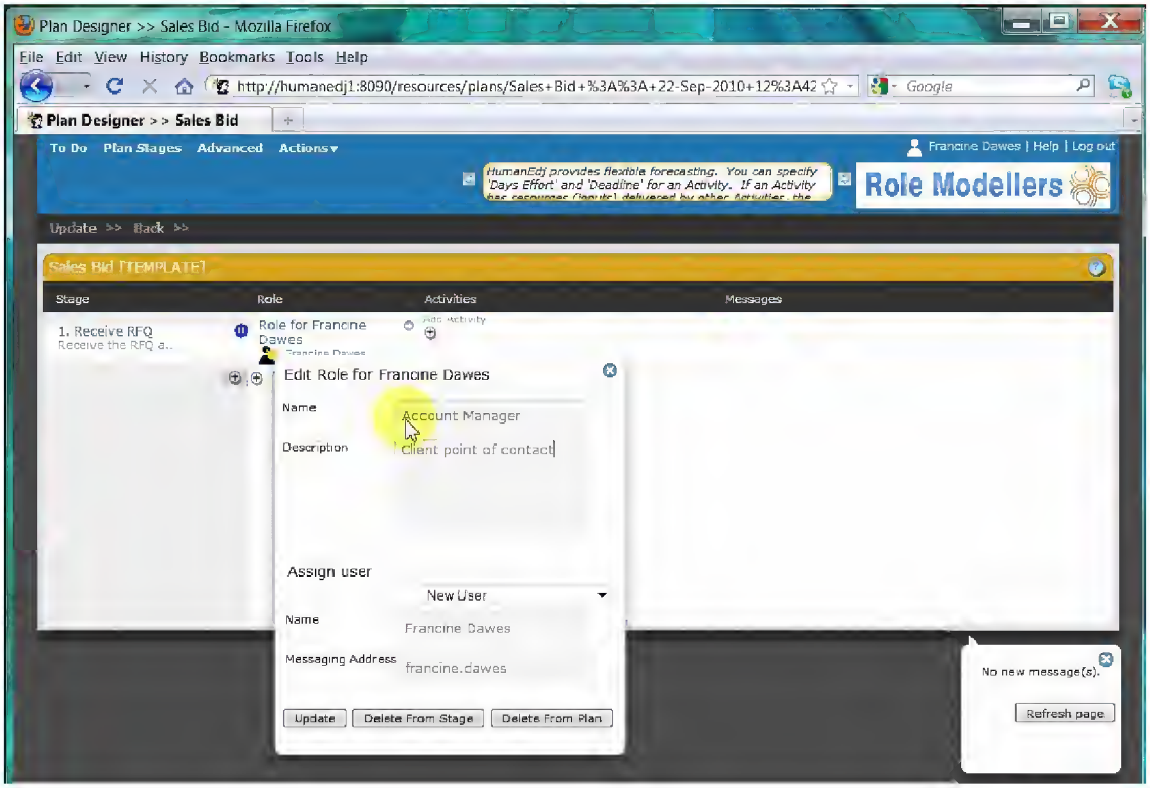
[1] In a deployment requiring unlimited HumanEdj user accounts, each person can install their own copy of HumanEdj – a Plan may span multiple HumanEdj instances. Alternatively, site licenses for any number of users are available from Role Modellers.



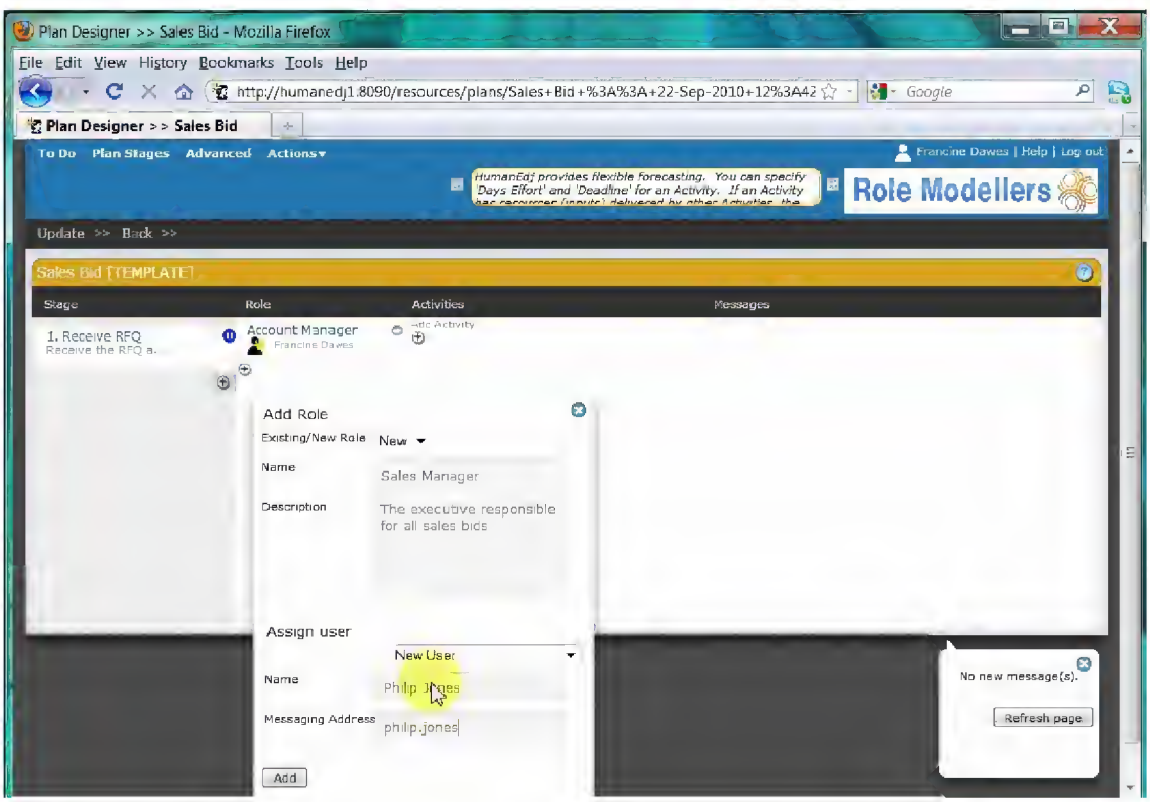
Similarly, rename the initial Stage by **double-clicking** on the title and add a description, leaving it "Enabled by default":



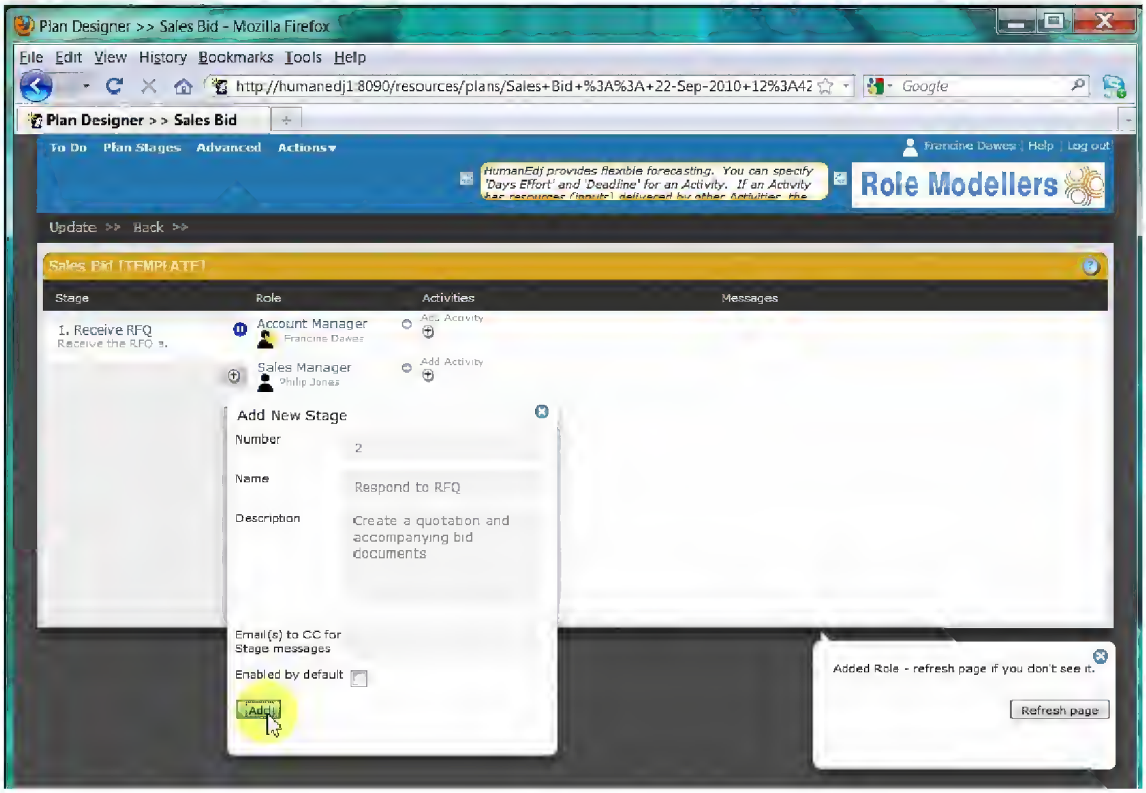
Rename the initial Role (again, **double-click** on the title) – by default, this is assigned to you:



Click on the + button underneath the initial Role to add a new Role. Name it, and assign it to a colleague (alternatively, you can leave the Role unassigned, and assign the Role when making a Plan from the template):



Finally, add a second Stage, unchecking "Enabled by default" since if no response is required for an RFQ the second Stage will never be used:

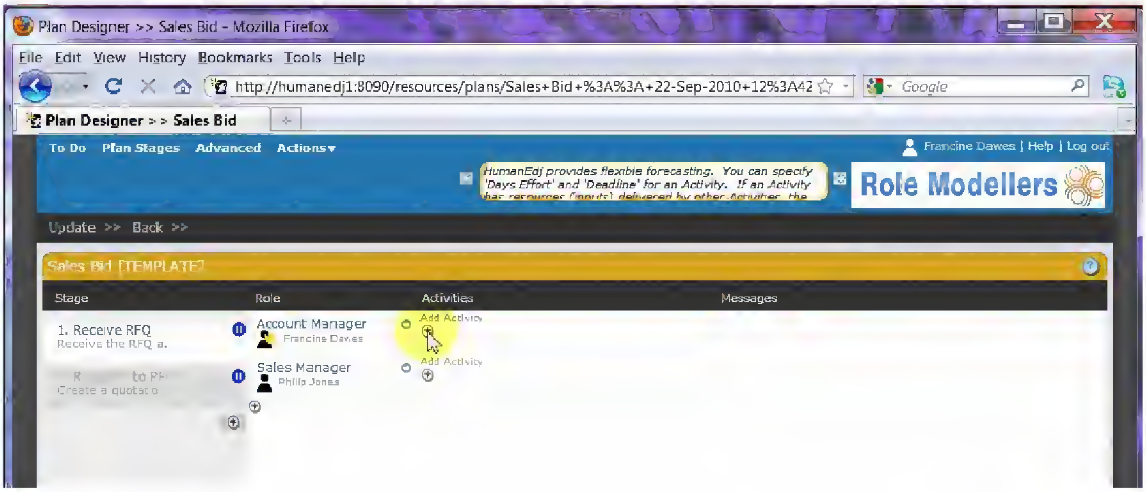


Note that all Roles in the first Stage are automatically added to the second Stage. Being in a Stage means you have access to its messages, data and documents, even if you have no work to do in that Stage. Roles can be removed from a Stage if desired.

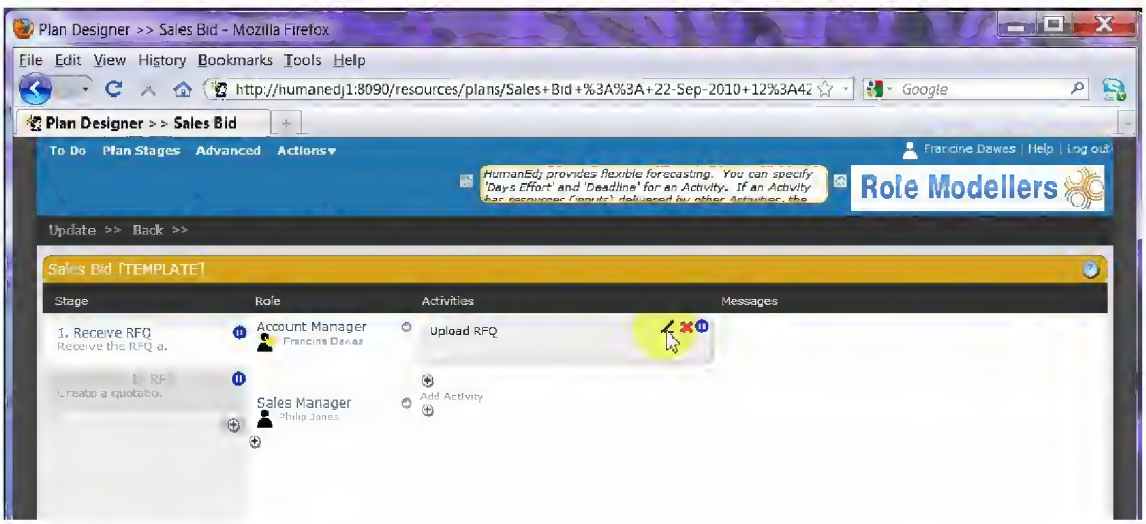
You now have the skeleton of a Plan template for managing a Sales Bid. Next you will add deliverables to the Roles in the first Stage – the RFQ document that initiates the bid, and the decision whether or not to tender.

Creating Activities In Roles

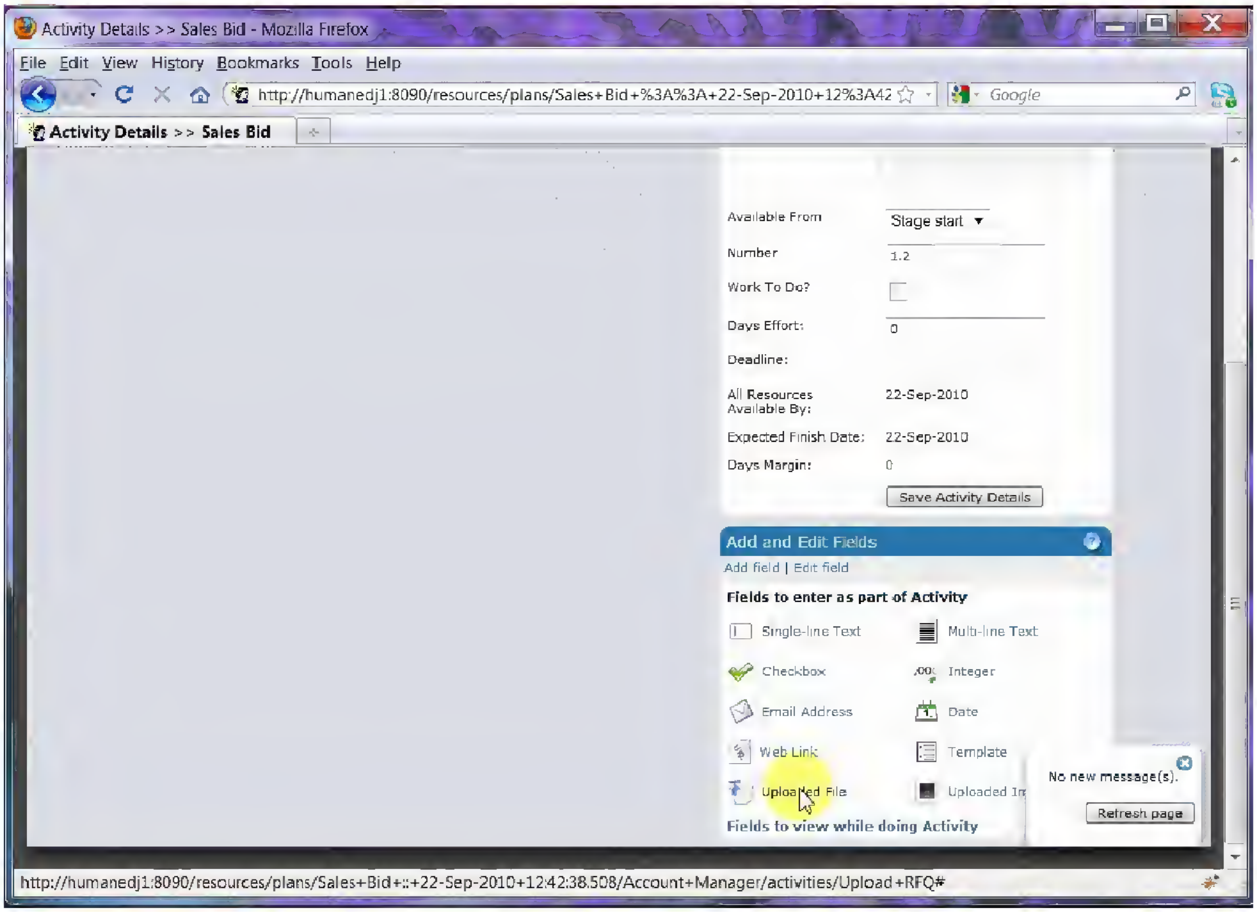
In the Account Manager Role, create an Activity to upload the RFQ document. Click on the + button underneath "Add Activity":



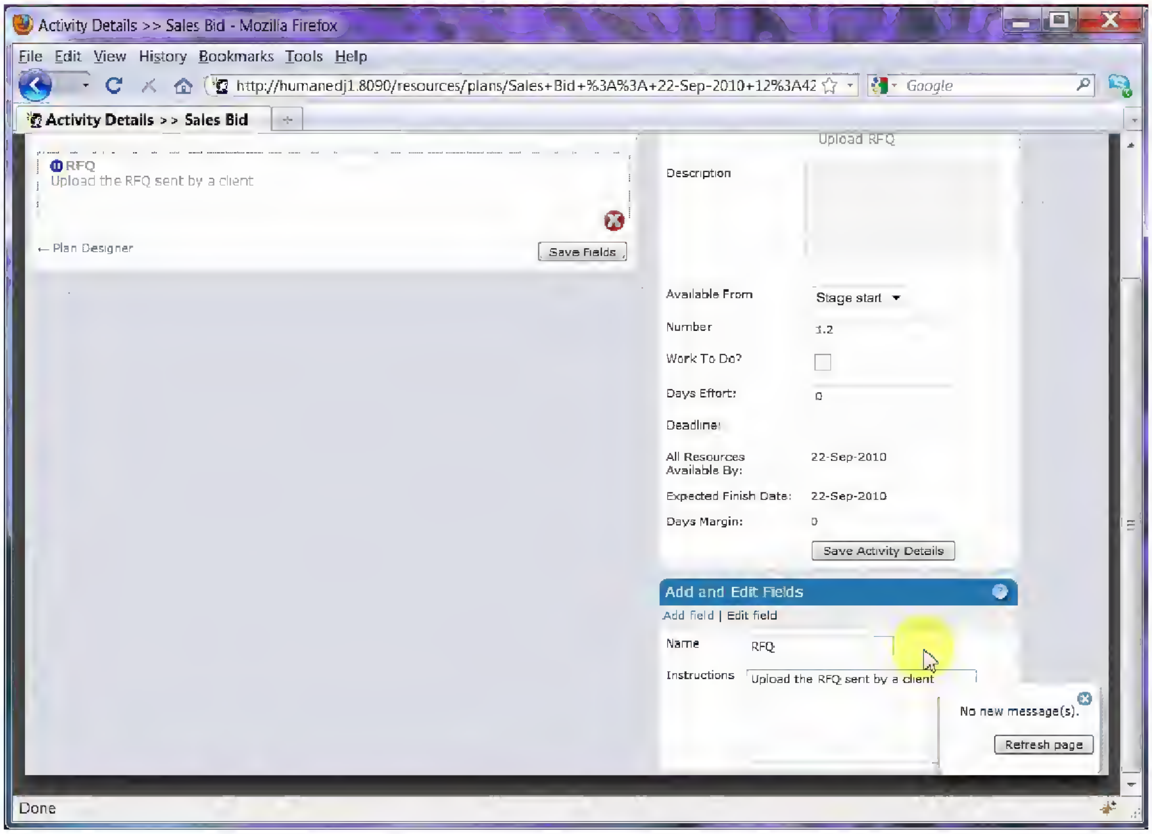
In the dialog box that pops up, name the Activity “Upload RFQ”. Then hover over the Activity and click on the pen icon:



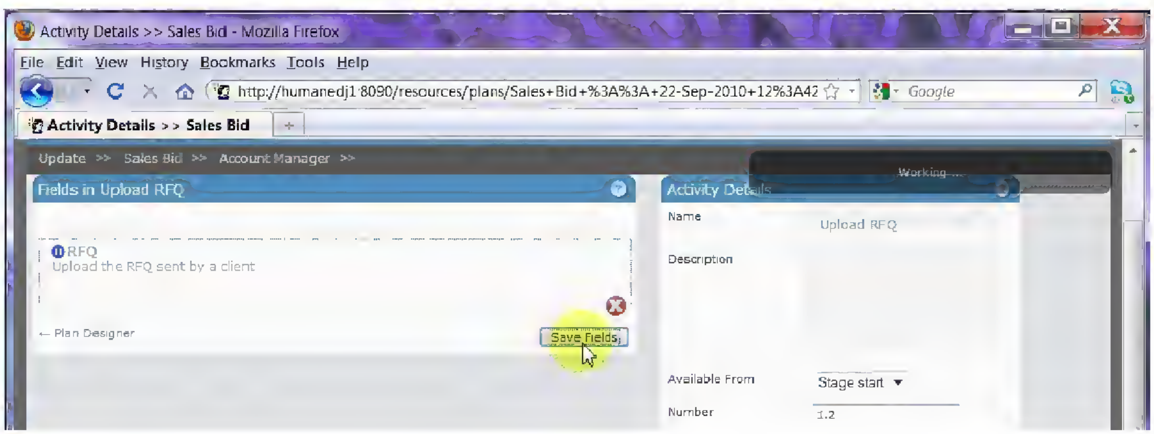
In the Activity page, add an “Uploaded File” field to the Activity:



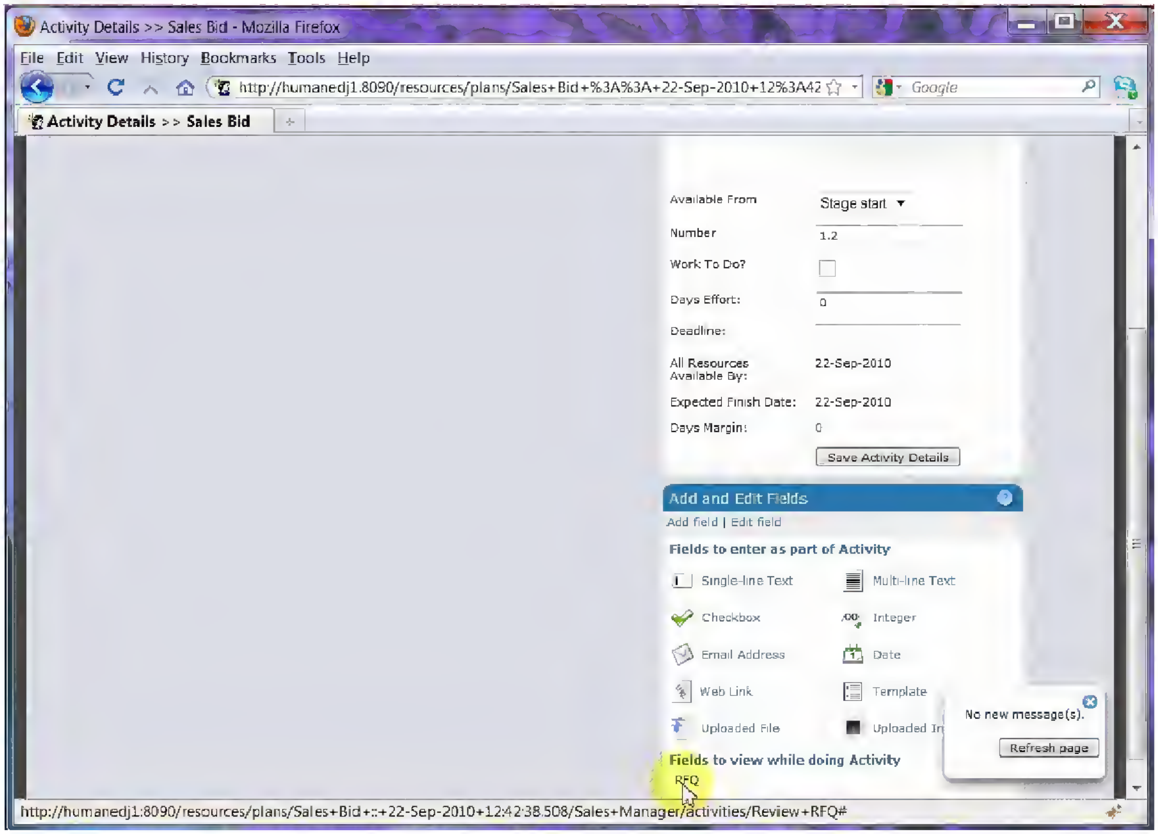
Name the field "RFQ" and add a description:



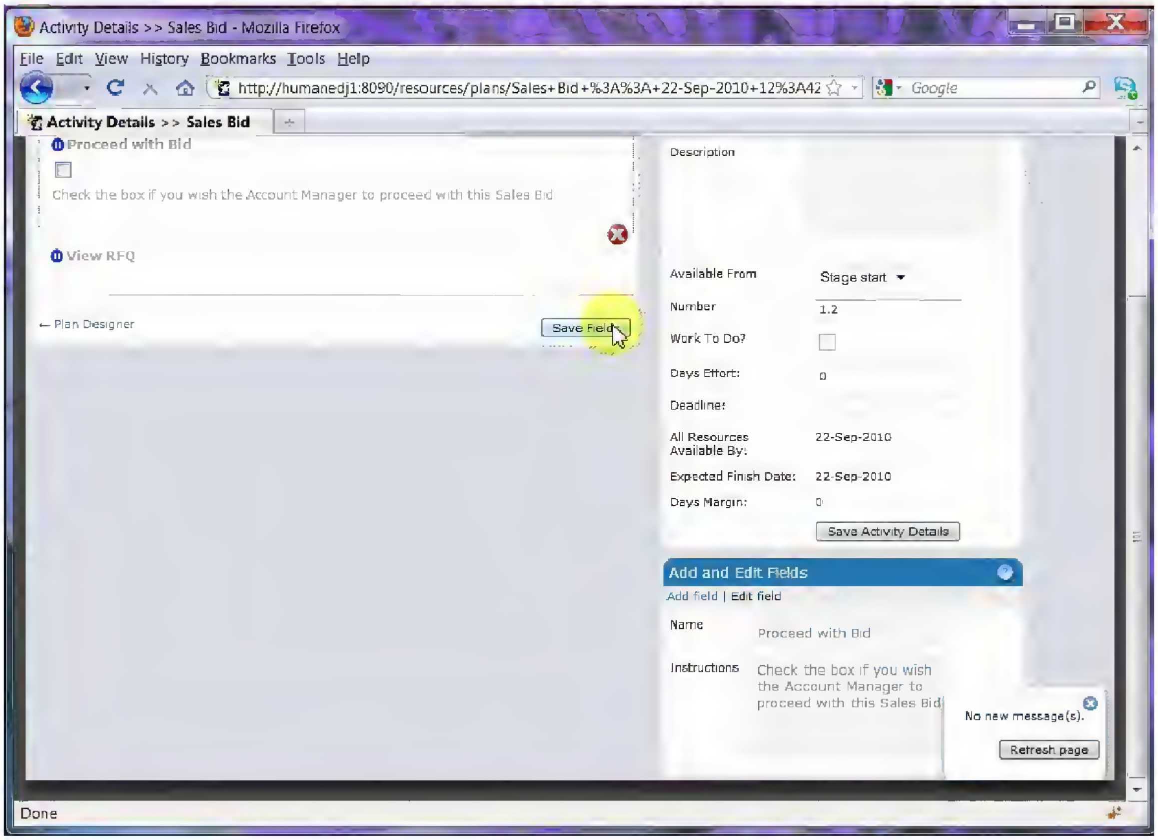
Click on “Save Fields” to save your changes:



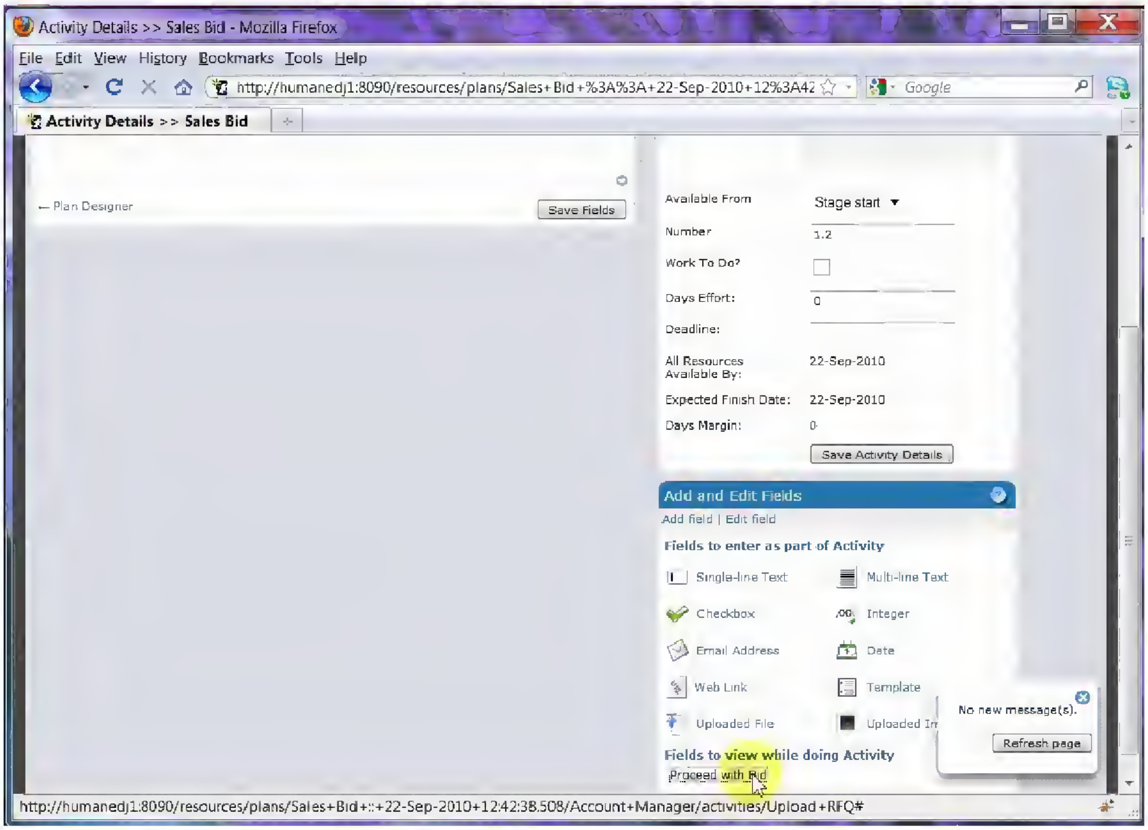
Now add an Activity “Review RFQ” to the Sales Manager Role, in which they can review the RFQ document and enter their decision whether or not to proceed with the Sales Bid. This new Activity should have as a “resource” the RFQ document:



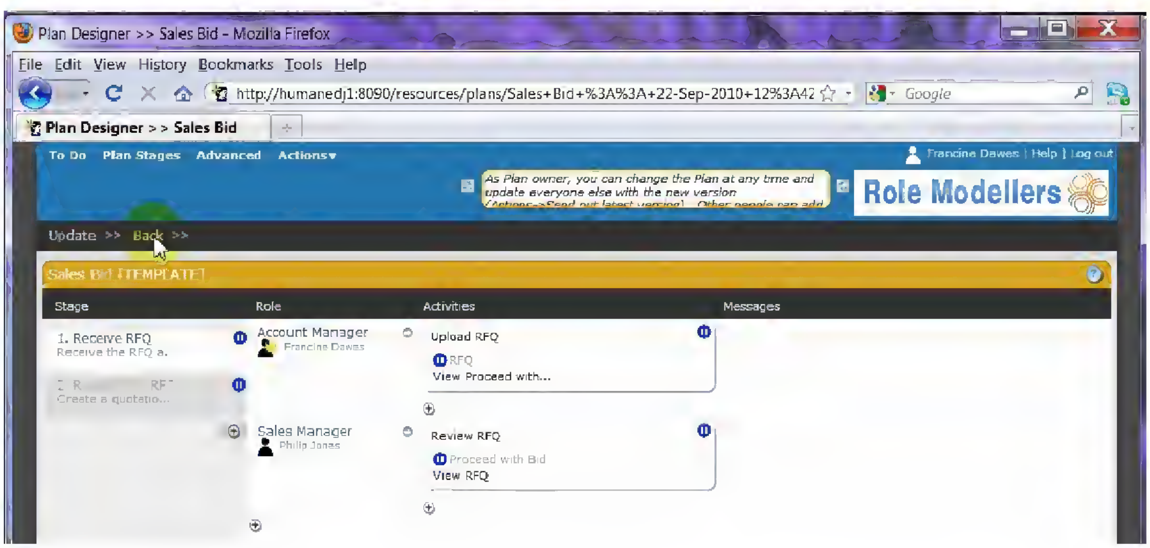
Also add a checkbox “Proceed with Bid” to the new Activity, and “Save Fields”:



Finally, in the Account Manager Role, extend the "**Upload RFQ**" Activity to include as a resource the decision made by the Sales Manager (**remember to "Save Fields"**):



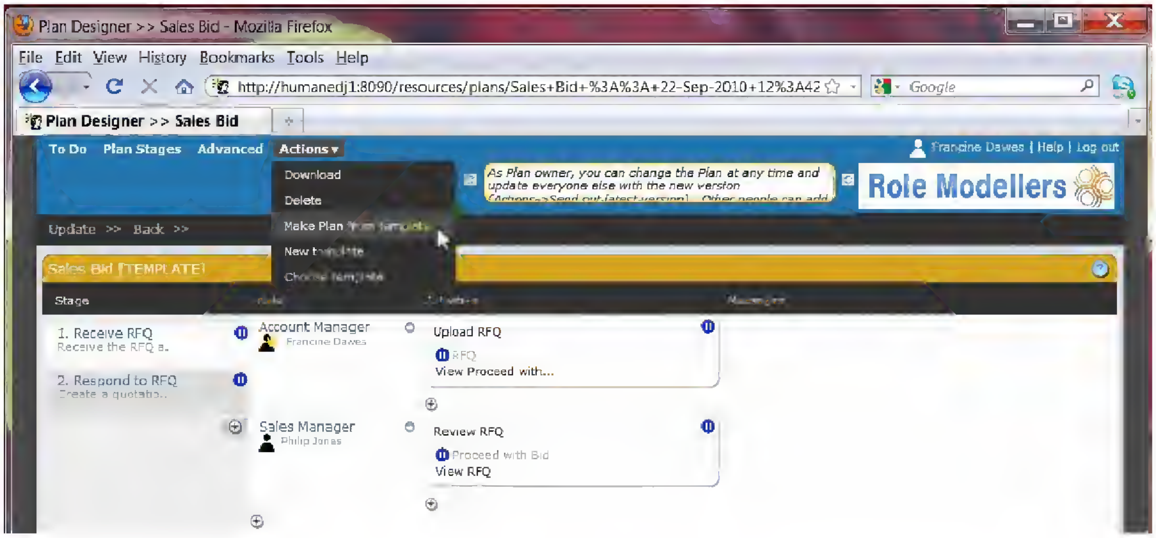
Now you have a basic Plan template, in the first Stage of which the Account Manager can upload an RFQ, and the Sales Manager can review the document then decide whether or not to submit a tender:



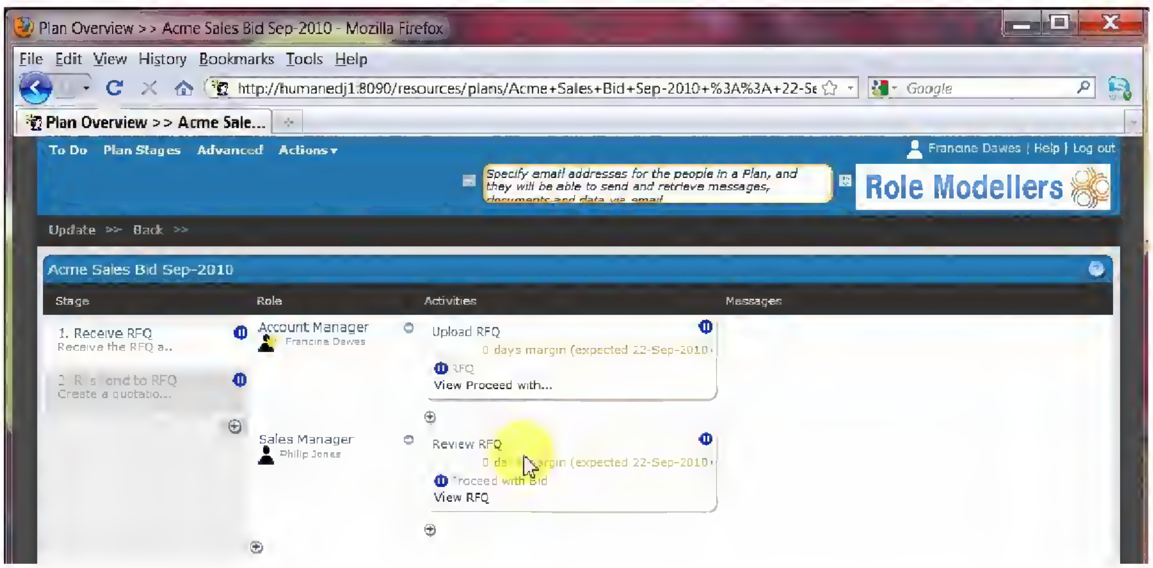
This minimal template is enough to start doing real work.

Making A Plan From A Template

To make a Plan from your template, choose “Make Plan from template” from the **Actions** menu:



Enter a name from the new Plan, and click OK. You will be asked to confirm that you want to send invites to all participants – click OK, and the new Plan will be displayed:

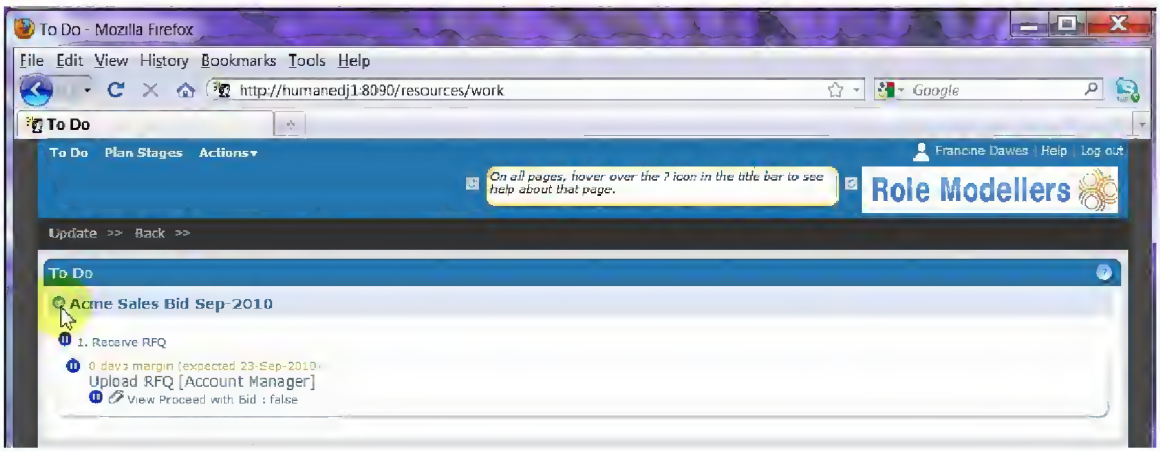


To see that your colleague has been invited to join, login to their account (see note above about using multiple Web browsers to facilitate switching users). The Plan does not appear on the **To Do** page at first, since the message containing the new Plan is received in the background after the page has loaded – a "New Message(s)." notification will warn you of this. Click on **Plan Stages** and you will see the new Plan in their workspace:

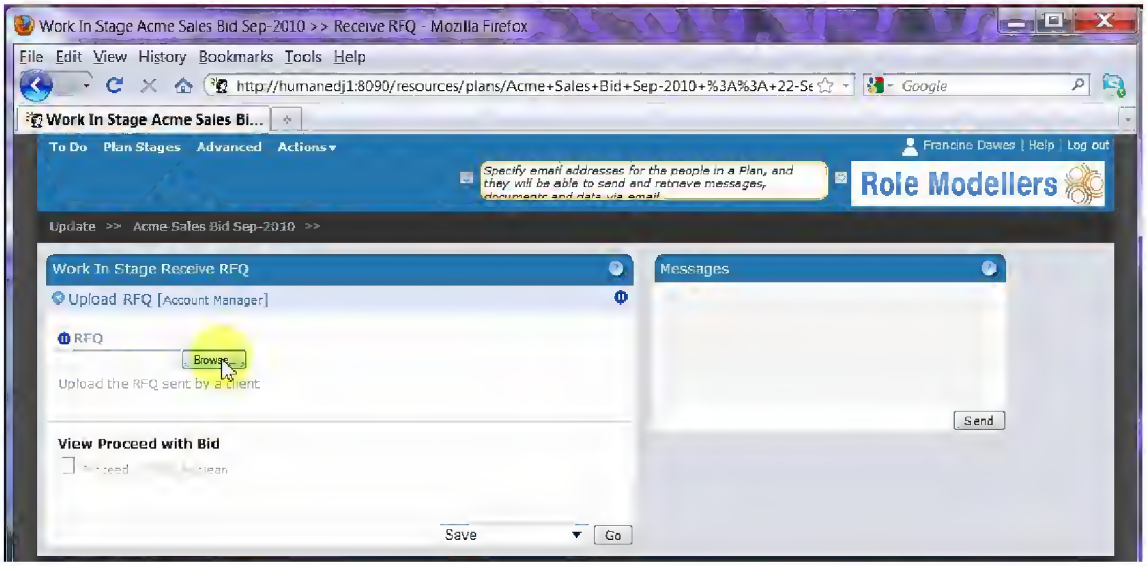
Next you will use the Plan to do some work.

Doing Work

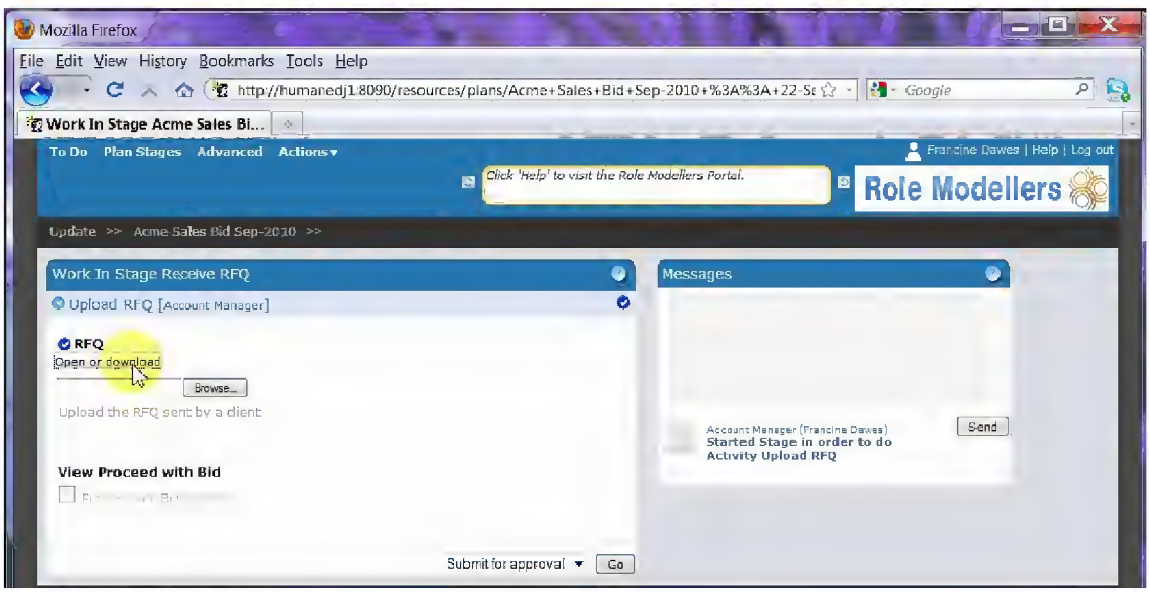
Login as yourself again. In your **To Do** page, you will see the Plan you just made. Click on the arrow by the Plan name to see your current work in this Plan - the Activity in which you upload an RFQ (don't click on the Plan name itself, since this will take you directly to the Plan overview):



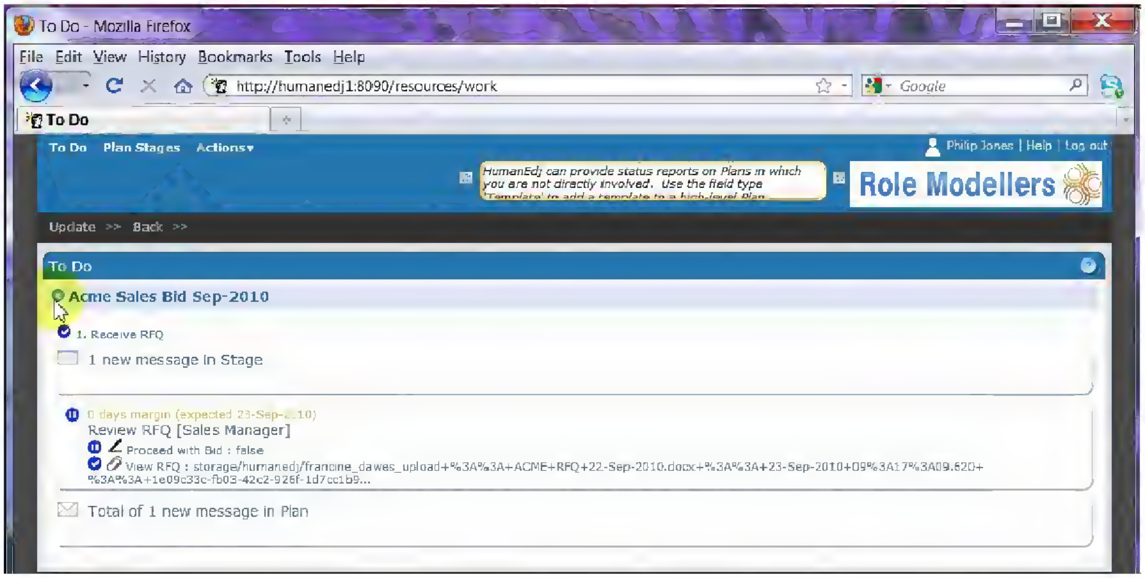
Click on the Activity, and upload any document as the RFQ:



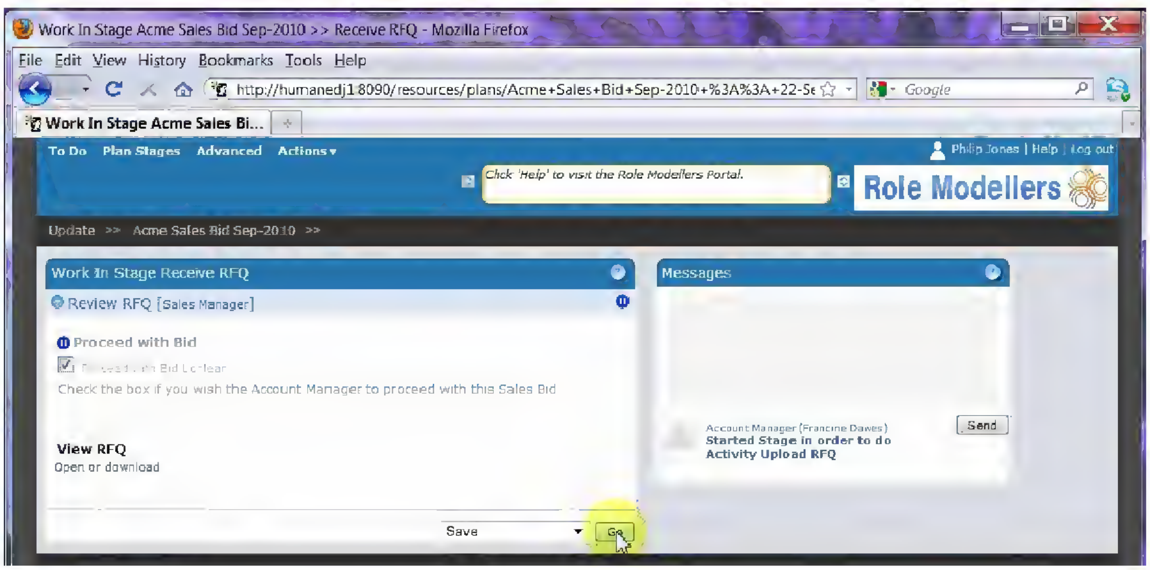
Click on “Save” and the file will be stored by HumanEdj (you can also choose various other statuses, including “Submit for approval”, which tells the Plan owner that your deliverables in that Activity are ready for their approval). You can now view the file from the Web browser by clicking on “Open or download”:



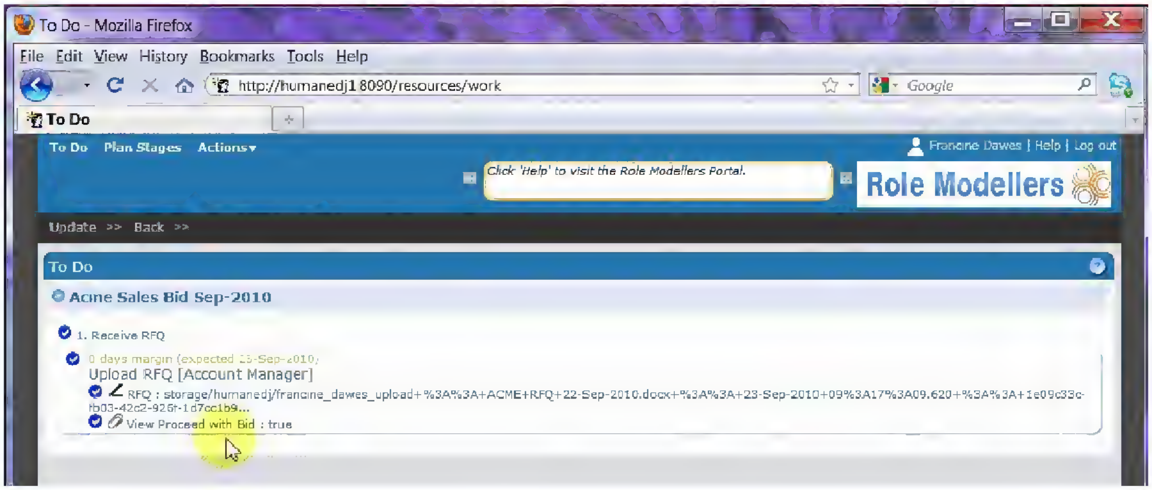
The file will also have been shared with other Roles in the Stage. Login as your colleague to see that their **To Do** page shows the uploaded file:



As your colleague, view the uploaded file and approve the bid:



As yourself, you will see from your **To Do** page that the bid has been approved by your colleague:

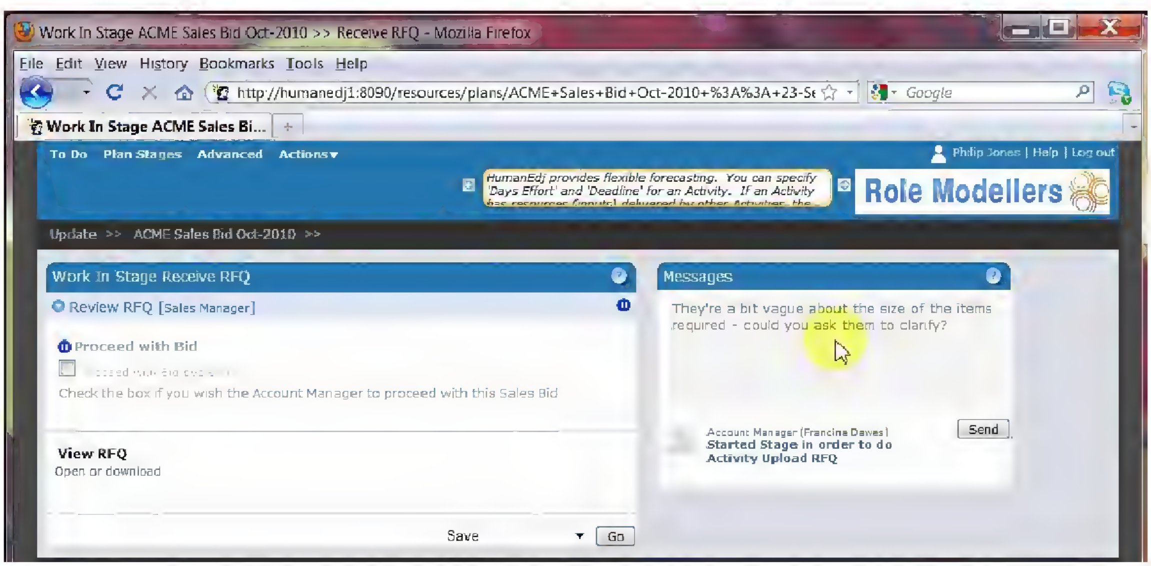


This simple sequence of events is a classic "happy day" scenario, in which the work proceeds smoothly from one step to another with no hitches, rework, or need for Plan change. Unfortunately, life is not very often like this, even in the simplest human-driven processes, so next we will see some of the means for dealing with unpredictable circumstances via HIM.

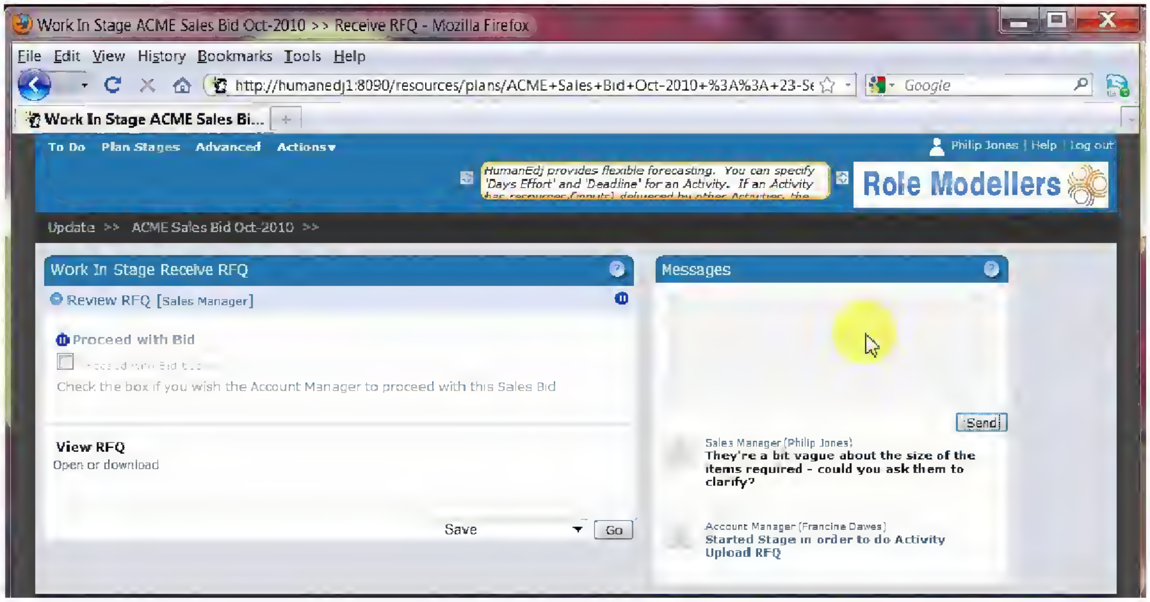
Messaging

The first and most basic technique for dealing with change is simply to communicate in a structured way. In HIM, this means sending a message in a Stage. As mentioned above, any message sent in a Stage is delivered to all (and only to) participants in that Stage, whether or not they have Activities and/or deliverables in that Stage. The idea is to provide clear visibility of issues to those people with a specific interest in the progress of the Stage.

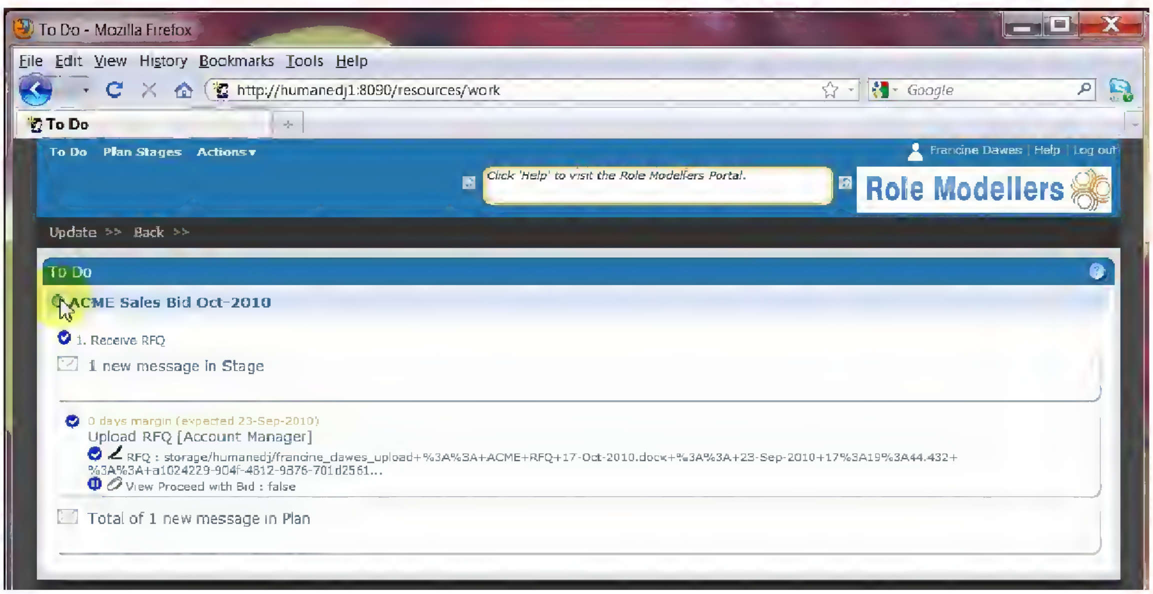
In HumanEdj, messages are sent and viewed in plain text, from the page that displays your work in the Stage. To see how this works, login as your colleague and review the FRQ as the Sales Manager. Supposing that you need to ask the Account Manager a question, click in the Message window and type your message:



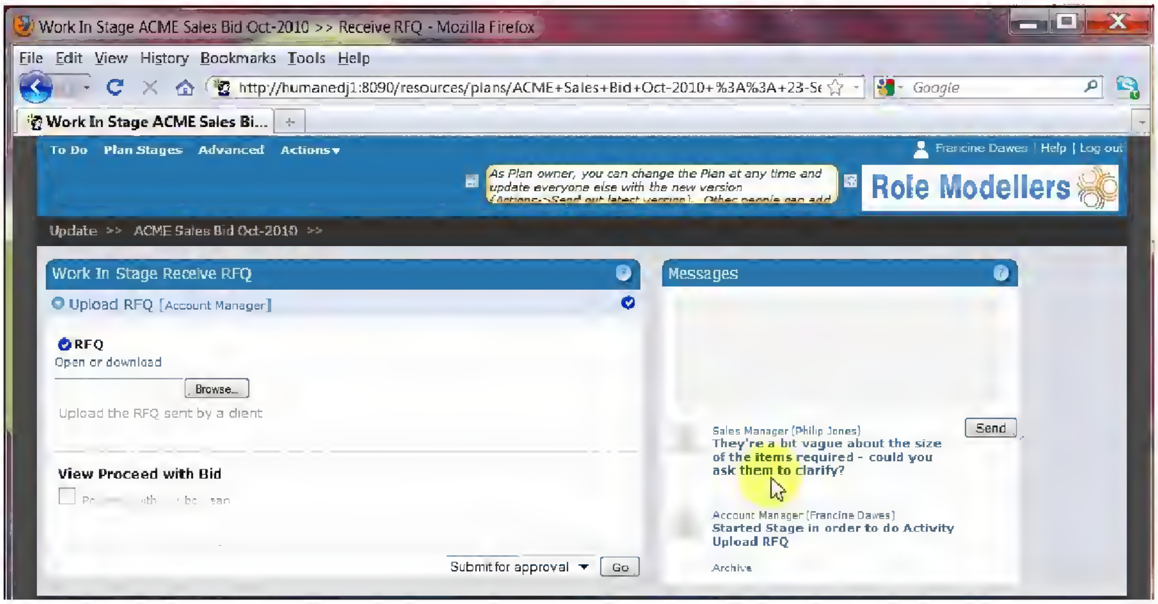
Then click "Send" – or, if you prefer not to switch from keyboard to mouse after typing, you can press Control+Enter (Apple+Enter on a Mac) then the Enter key. The message will appear in the list:



Now login as the your colleague, the Account Manager. They will be warned that there are "New Message(s)". Refresh the current page to see the message on the **To Do** page:



Click on the message to see details in the Stage context:

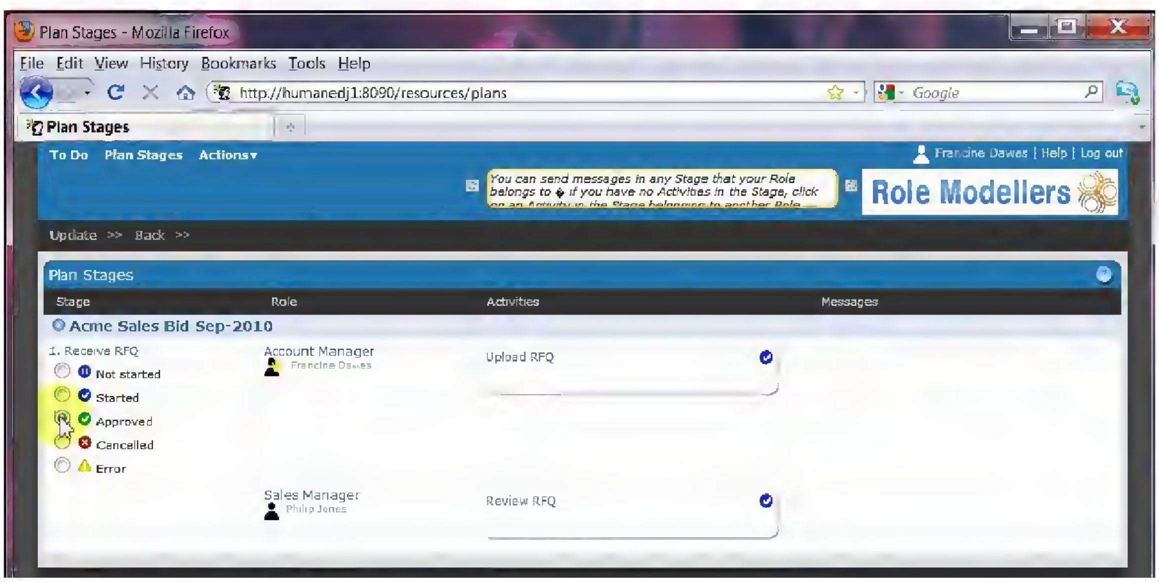


You can also access messages from **Plan Stages** and the Plan overview.

Next we will look at how to respond to events in a HIM Plan. There are many ways to do this. Here we will show how to manage Stages, how to change a Plan during usage, and how to set statuses on deliverables.

Managing Stages

In our simple example Plan, the first Stage is now complete. As the Plan owner, you can approve the Stage from the **Plan Stages** page:

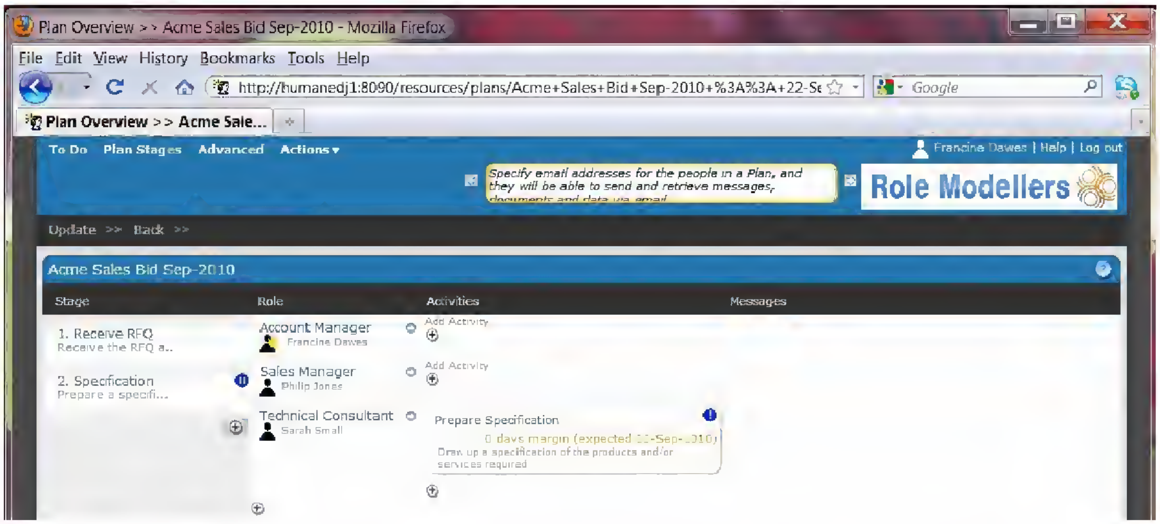


There is no need to click a button to confirm this change. Once your colleague receives the message communicating the new status, their **Plan Stages** page will also show the Stage as approved.

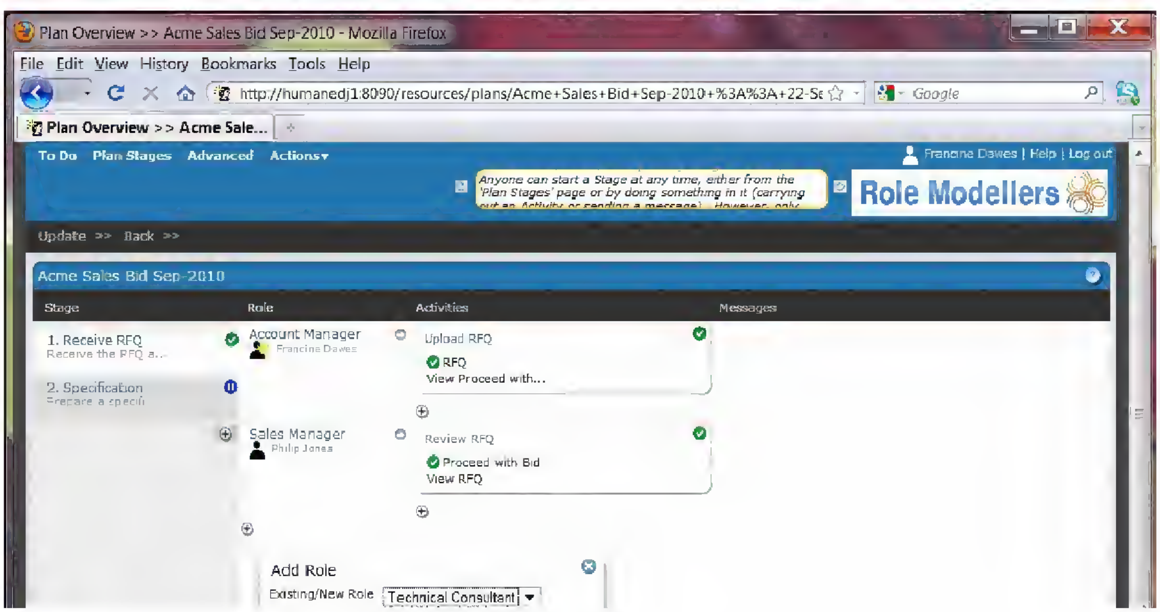
Your colleague cannot change the Stage status. Members of a Plan apart from the owner can only start a Stage that is currently “Not started” (so that they are not blocked from doing work via the system), which is done automatically on their using an Activity in such a Stage.

Changing A Plan

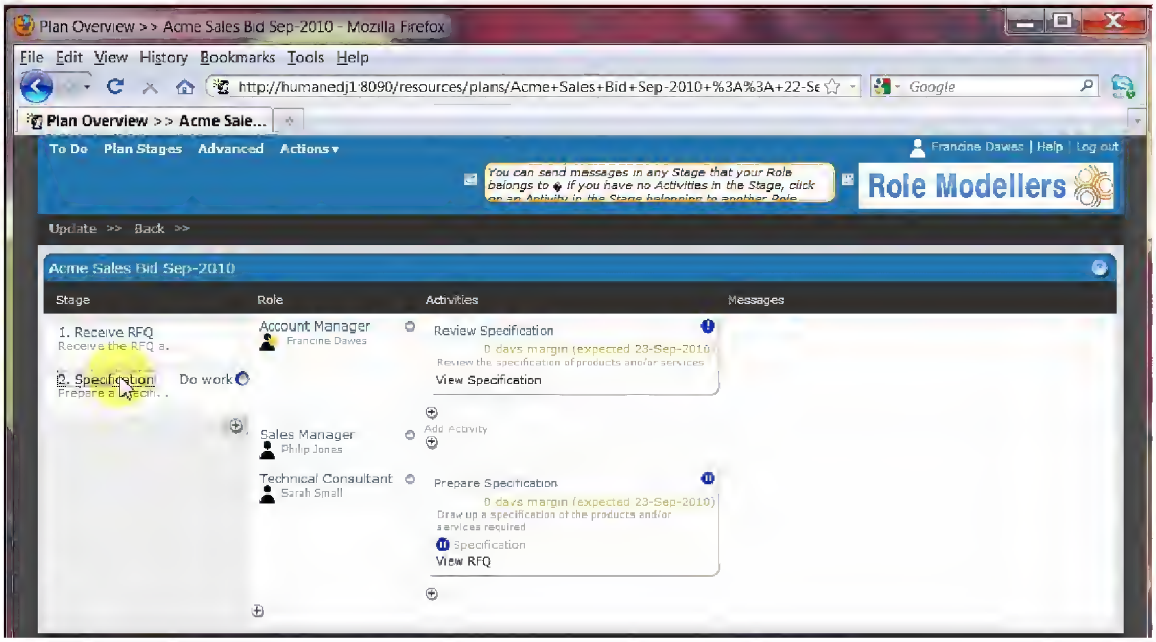
Next we will update our Sales Bid to add a new Stage, in which a Technical Consultant prepares a specification document. This is done in the same way as editing the original template. Go to the Plan from **Plan Stages** then rename the second Stage to “Specification”, add a new Role “Technical Consultant”, and add an Activity “Prepare Specification” to the Role:



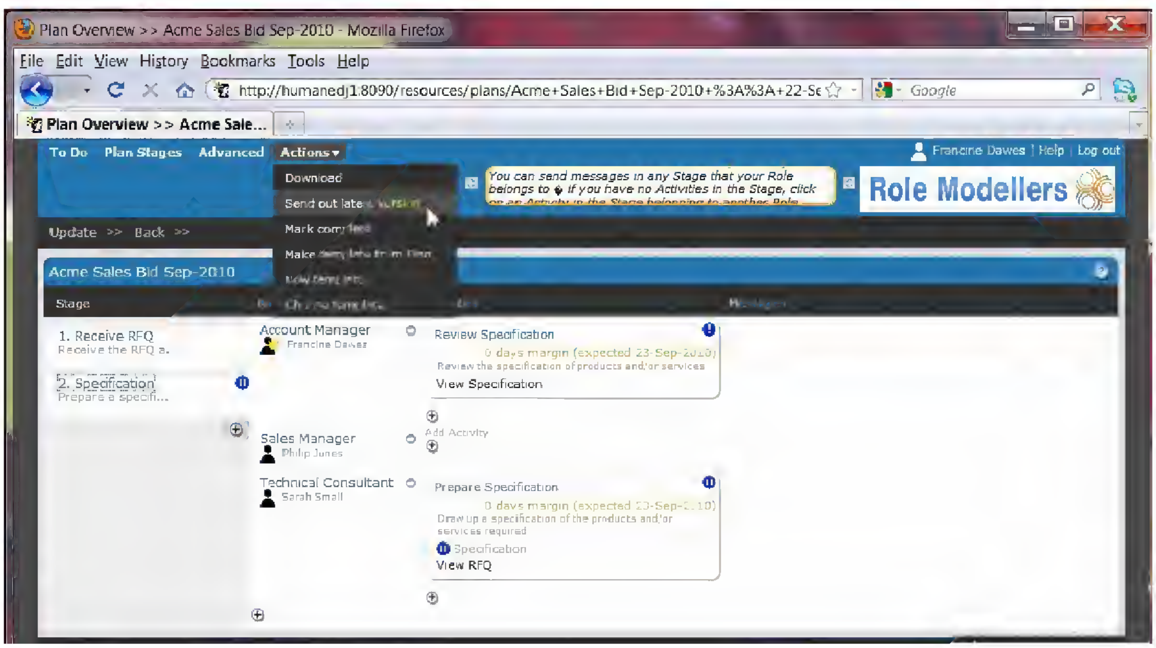
So that the Technical Consultant can view the RFQ, add it to the first Stage (otherwise it will not be able to view any deliverables of that Stage):



Now add 2 Activities in the second Stage - one for the Technical Consultant to review the RFQ and upload a Specification document, and one for the Account Manager to review the Specification document:



Finally, send out the new version of the Plan to all involved, now including the Technical Consultant:



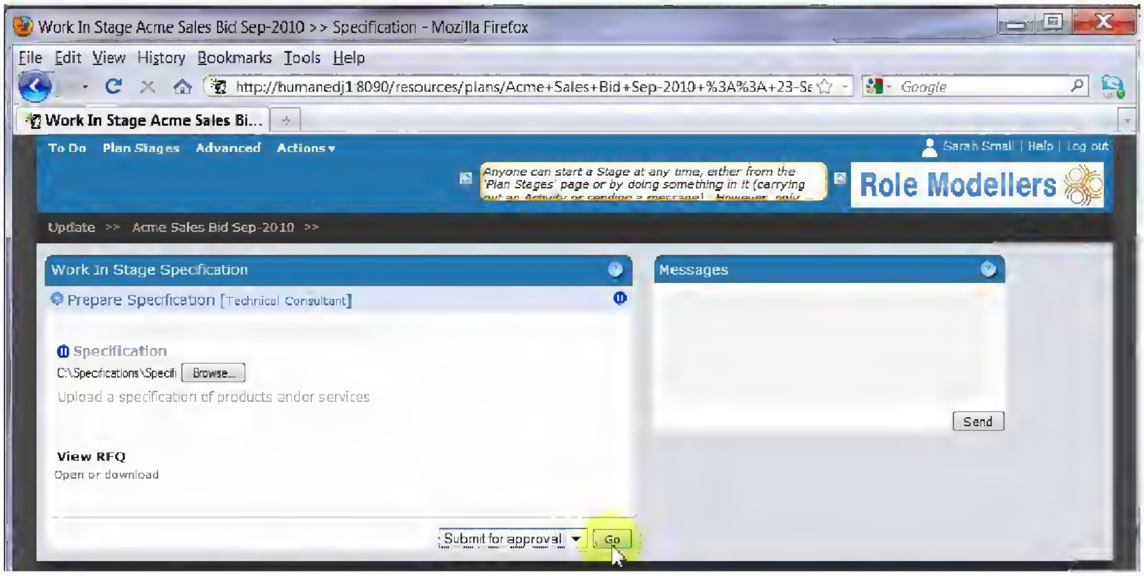
Once they receive the message, their version of the Plan will automatically change to include the changed Stage name and new Activities.

Note that any Plan can be used as a template from which to make future Plans – simply select **"Make template from Plan"** from the **Actions** menu. In other words, you can adapt and improve Plans on the fly – then re-use the improved versions for future work.

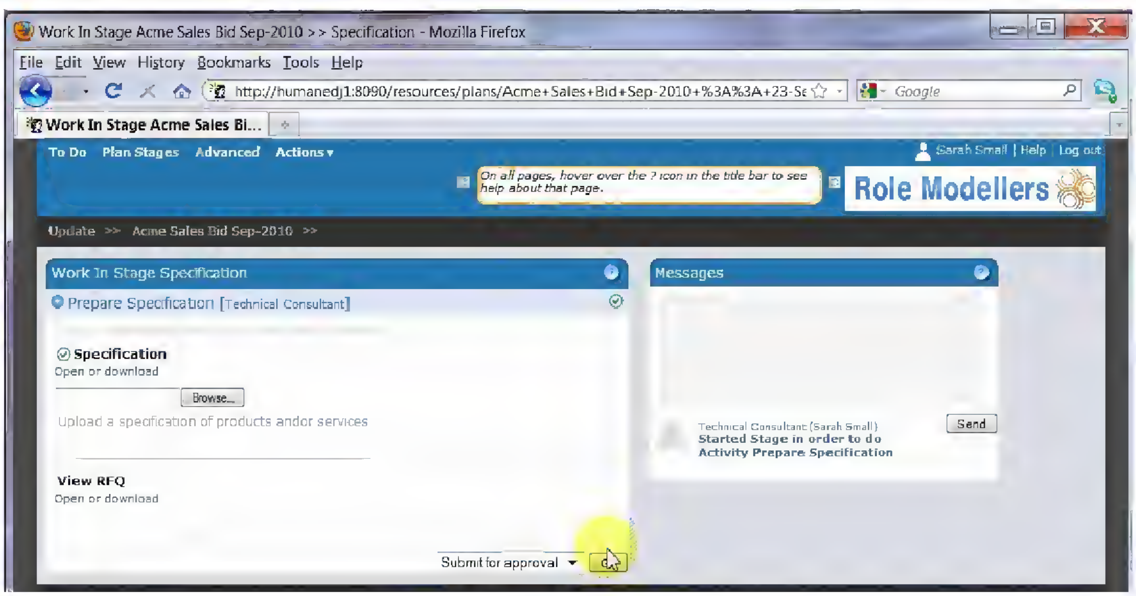
Managing Deliverables

The last feature we will look at in this article is how to control the status of deliverables.

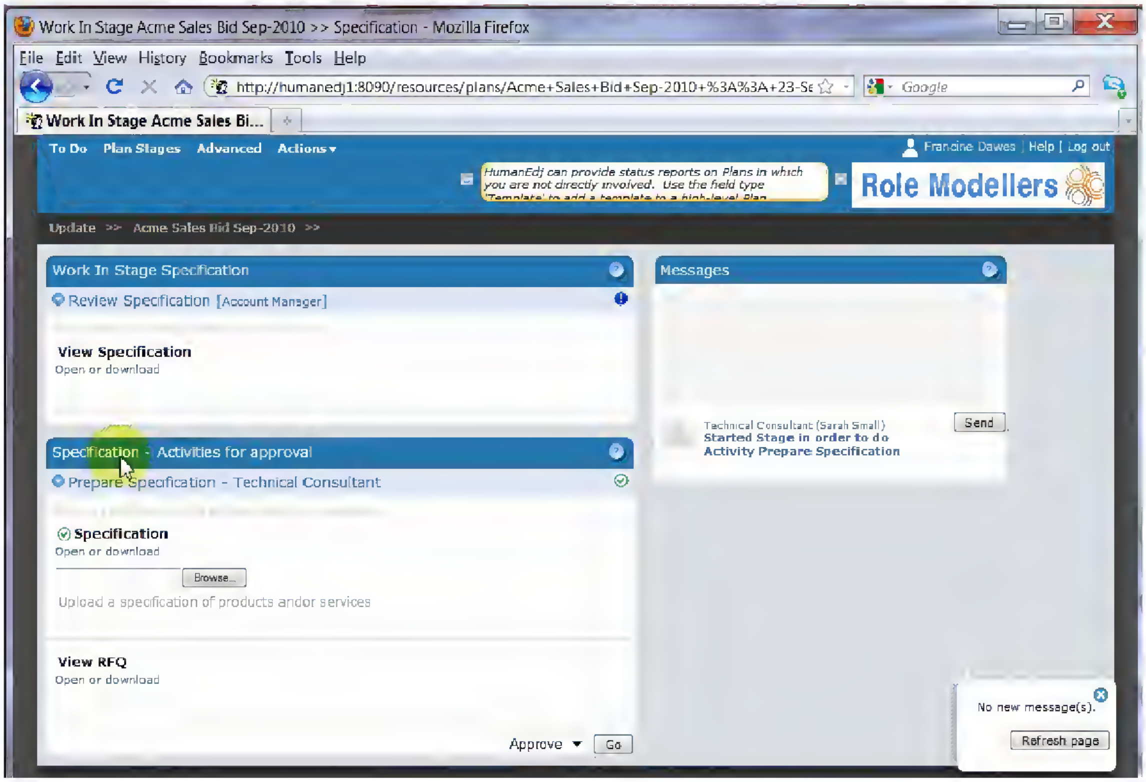
Login as the Technical Consultant, upload a specification, upload it and choose "**Submit for approval**" from the drop-down list:



Note that the icon for the document changes accordingly:

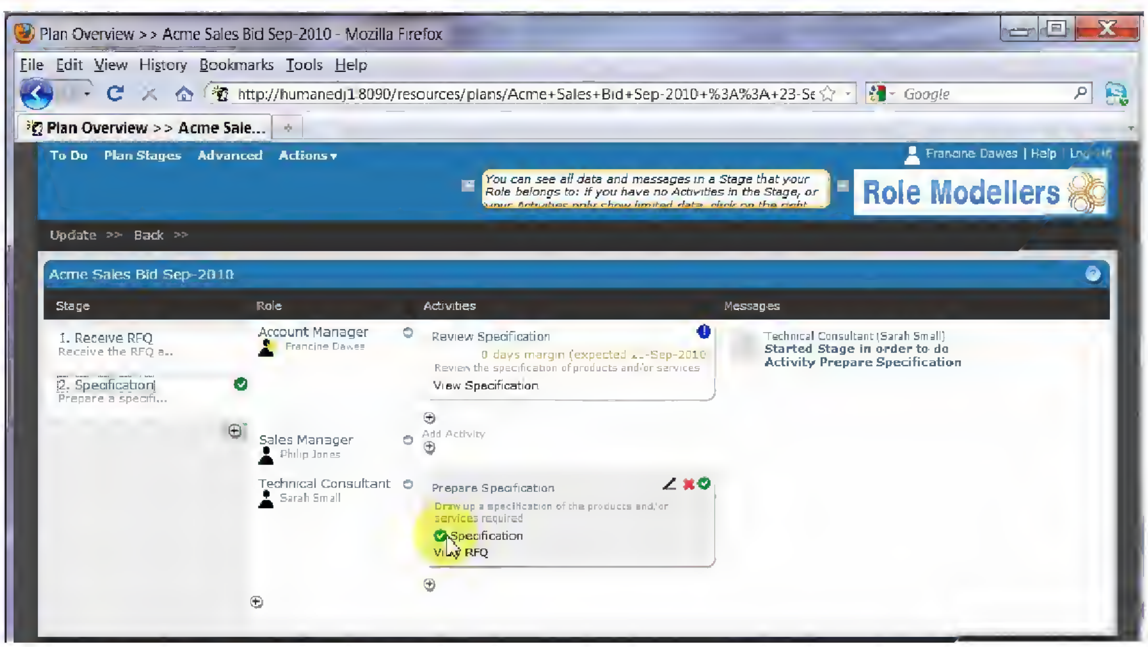


Now login as the Account Manager and note that you have both work to do (to review the Specification) and work to approve (the Activity of the Technical Consultant):



Since you can open or download the specification document from the approval area, it was not strictly necessary to create the "Review Specification" Activity for the Account Manager. However, having this extra Activity means that the Account Manager is able to look at the Specification while it is in draft status – i.e., before it is formally submitted for approval.

Still as the Account Manager, approve the work of the Technical Consultant, and visit the Plan overview to see that the icon changes yet again to reflect the new status of the deliverables in that Activity:



Human-driven processes are based on information (rather than on tasks, as in mainstream BPM and Adaptive Case Management), so it is vital to have a flexible means of managing the various information items created during the course of a Plan and providing clear visibility of their current statuses.

Conclusion

This article showed the basics of how to build and use HIM templates and Plans to manage and improve processes in which people collaborate flexibly, often across boundaries.

Many key aspects of HIM implementation have been left for future articles:

- Forecasting delivery dates where deliverables are dependent on each other, and adjusting dependencies and deadline to avoid slippage
- Plans within Plans, and how to view the progress of sub-Plans
- Using email to participate in Plans
- Web service integration (with or without BPMS-based orchestration)
- Usage of business rules

There are videos demonstrating some of these features online (http://bit.ly/hims-videos).

Another topic that I hope to cover in future is the **Goal-Oriented Organization Design** methodology (**GOOD**, http://bit.ly/good-methodology) for applying HIM to enterprise-scale transformation. GOOD, originally developed for a large-scale public sector project, is equally applicable to the private sector and scales naturally for use by organizations, divisions, departments, or teams of any size.

Next Steps

For more information and to get started with HIM, follow the links below:

- HIM theory: http://bit.ly/him-theory
- HIMS technology: http://bit.ly/hims-technology
- Step-by-step video guides to the free HumanEdj: http://bit.ly/hims-videos
- GOOD method: http://bit.ly/good-methodology

Author

Keith Harrison-Broninski has been regarded as an IT and business thought leader since publication of his book "Human Interactions: The Heart And Soul Of Business Process Management" (Meghan-Kiffer Press, 2005 - "a must read for Process Professionals and Systems Analysts alike", BPM Group). Building on 20 years of research and insights from varied disciplines, his theory of Human Interaction Management (HIM) provides a new way to describe and support collaborative human work.

Conference organizers around the world regularly invite Keith to give keynote lectures to business, IT and academic audiences at national conferences, most recently in Poland, India, the Netherlands, the UK, Finland and Portugal.

Keith is CTO of Role Modellers, whose mission is to develop understanding and support of human-driven processes - the field that Keith has pioneered. Role Modellers' software product,

HumanEdj, leads the industry in computerized support for innovative, collaborative human work. Visit humanedj.com to try online or download HumanEdj, which is free for individual use.

Keith stays active as a business consultant and software architect, via which activities he continues to refine and extend HIM theory.

More information about Keith and his work is available online (http://keith.harrison-broninski.info).